

BS-099801/17 BAYER AG 04.10.83-DE-335956 (18.04.85) C07d-239/42 C06-02/20 D06p-01/38 New reactive dyes contg. chloro-fluoro-pyrimidinyl gp. - for dyeing polyamide, polyurethane and cellulose	A60 E23 F06 FARB 04.10.83 *DE 3335-956-A	At8-E3, 12-S5N, 12-S5P) E(7-D12, 21-D2, 25) F(3-F2, 3-F3, 3-F6, 3-F10, 3-F16)	115
C85-043136	Reactive dyes of formula (I) are new:		
<div>$D \leftarrow B-N \begin{pmatrix} R_1 \\ \text{Pyrimidine Ring} \\ R_2 \\ R_3 \end{pmatrix}_n \quad (I)$</div>			
<p>D = organic dye residue; n = 1-4; B = direct bond or bridging gp. to a C atom in an aromatic carboxylic ring or to a C or N atom in a heterocyclic aromatic ring of D; R = H or opt. substd. 1-4C alkyl; R₁ = H, halo, opt. halo-substd. 1-4C alkyl or 2-4C alkenyl, NO₂, CN, SO₃H, opt. N-substd. carbamoyl or sulphonate ester;</p>			
<div>$\begin{matrix} & Cl \\ & \\ F & -C- & N(R_8) \\ & \\ & F \end{matrix}$</div>			
<p>R₈ = H or 1-4C alkyl, opt. substd. by MeO, OH, COOH or SO₃H; and R₉ = H, 1-4C alkyl (opt. substd. as R₈), phenyl (opt. substd. by Me, Et, OMe, OEt, Cl, COOH or SO₃H) or naphthyl substd. by SO₃H.</p>			
<p>USE (I) are useful for dyeing or printing OH- or N-contg. DE3335956-A</p>			

fibres, e.g. wool, silk, synthetic polyamide or polyurethane or natural or regenerated cellulose.	STARTING MATERIALS (III; R ₁ = Cl) is reacted with NHR ₈ R ₉ , pref. in an aq. system at pH 6-7, to give (II).
PREFERRED DYES	EXAMPLE
$D'-N' \begin{pmatrix} R'_1 \\ \text{Pyrimidine Ring} \\ R'_2 \\ R'_3 \end{pmatrix}$	65.5 g of 2-(2-sulphophenylazo)-1-hydroxy-8-(2,4-difluoro-5-chloropyrimidin-6-yl)amino-naphthalene-3,6-disulphonic acid (see Example 18 of DE1644171) was dissolved in 600 ml water. 25% NH ₃ was added to pH 8.9 and the mixt. reacted at 50°C (maintaining the pH) until t.l.c. showed reaction was complete.
<p>D' = sulpho- and/or COOH-contg. residue of mono- or poly-azo, metal complex, anthraquinone, phthalocyanine, formazan, azomethine, nitroaryl, phenazine or stilbene type dyes; R'₁ = H or Me; R'₂ = H; and R'₃ = H; 2-,3- or 4-sulphophenyl or disulphophenyl.</p>	<p>HCL was then added to pH 6.5, the prod. salted out, filtered off, dried and ground to give dye (Ia) which was freely soluble in water and dyed cotton red.</p>
CLAIMED PREPARATION	$\text{SO}_3\text{H} \text{---} \text{C}_6\text{H}_4 \text{---} \text{N=N} \text{---} \text{Naphthalene} \text{---} \text{OH} \text{---} \text{NH} \text{---} \text{Pyrimidine} \text{---} \text{F} \text{---} \text{NH}_2$
<p>2,4,6-Trifluoro-5-R₁-pyrimidine (III) is reacted, in any suitable sequence, with D-B-N(R)H (IV) and HNR₂R₃, opt. with isolation of intermediates. In a modification, (IV) is replaced by a dye precursor, or e.g. an azo coupler, then this converted to (I) after condensation.</p>	<p>(71pp1251WADwgNo.0/0). DE3335956-A</p>